ME Civil, Structural & Environmental Engineering



This programme prepares graduates to work as professional engineers in the broad field of infrastructural design, construction and management. Graduates will satisfy the academic requirements for the title of Chartered Engineer. You can choose a specialisation either in civil, structural or environmental engineering and as

such the range of module options is extensive. The programme is delivered by a culturally diverse group of internationally renowned academic staff. The ME programme is professionally accredited by Engineers Ireland and recognised by the Washington Accord for Chartered Engineer status.



#### TOP INTERNATIONAL RANKING

This programme is delivered by a highly research intensive school, which is in the top 200 in the QS world subject rankings.

#### **COURSE CONTENT AND STRUCTURE**

**120 credits** taught master's

**65 credits** taught module:

**30 credits** work placement

**25 credits** research project

### Modules include:

- Case Studies
- Civil Engineering Systems
- Construction Management
- Design Project
- Geotechnical Engineering
- Highway Engineering
- Innovation Leadership
- Quantitative Methods for Engineers
- Structural Analysis, Design & Specification
- Water Engineering

#### Optional modules include:

- Advanced Environmental Economics
- Advanced Structural Analysis and Design
- Applied Statistical Modelling

- Bridge Engineering
- Computational Continuum Mechanics I
- Creative Design and Idea Development
- Environmental Engineering and Reliability
- Environmental Impact
   Assessment (Biology & Environmental Sci)
- Environmental Legislation & Regulations
- Fibre Reinforced Composites
- Geographical Information Systems
- Hydraulic Engineering Design
- Innovation Leadership
- Integrated Municipal Solid Waste Management
- Introduction to Environmental

#### Science

- Peer Assisted Tutoring in CSEE
- Professional Engineering Finance
- Professional Engineerin Management
- Realising Built Projects
- Soil Mechanics and Geotechnical Engineering
- Soil-Structure Interaction
- Structural Design (Buildings)Structural Dynamics
- Transport Operations and
- Transportation Engineering
- Unit Treatment Process in
- Unit Treatment Process in Water Engineering
- Water, Waste and Environmental Modelling
- Waste managemen

## WHY STUDY AT UCD?



# Professional Work Experience

6-8 month Professional Work
Experience internship opportunity



### Tradition

Established 1854, with 160 years of teaching and research excellence



### Global profile

UCD is ranked in the top 1% of higher education institutions worldwide



#### Global community

Over 8,000 International students from over 139 countries study at UCD



#### Global careers

Degrees with high employability; dedicated careers support; two-year stay-back visa (for non-EU students)



#### Safety

Modern parkland campus with 24-hour security, minutes from Dublin city centre





the private sector (e.g., engineering consultancy, engineering design, project management, civil engineering contractors), in the public sector (e.g., local government, higher education sector), and in the non-governmental sector (e.g., environmental advocacies, NGOs), or may wish to pursue further qualifications (e.g., PhD, MBA) to become even more specialised.



Graduates will be equipped with the skills that allow them to be lifelong learners, whether in the pursuit of knowledge for personal use or in connection with their engineering careers. Employers of civil, structural and environmental engineers include commercial firms, engineering consultancies, government agencies, and non-governmental organisations, all well known in Ireland and many with global operations. Some of these include:

- AECOM
- Arup
- Environmental Protection Agency
- Local Authorities

- Nicholas O'Dwyer
- RPS Group
- SISI



## **GRADUATE PROFILE**

Larry Gaule
Ward & Burke Microtunnelling

be a civil engineer. Studying Civil, Structural & Environmental Engineering at UCD has allowed me to apply practical knowledge to the real world through lectures, field trips, lab work and tutorials. Working as a civil engineer is a rewarding profession where the work you do influences where people work, learn, relax and live. As technology changes and as population growth continues, civil engineers adapt the resources and infrastructure we have to meet

From a very young age, I've always wanted to

our needs. As part of the Professional Work
Experience module, I worked with an Irish-owned
company, Ward & Burke Microtunnelling in
Canada. Before I even graduated I was offered a
full-time position with them and I'm currently
based in Toronto, installing underground tunnels
for water and wastewater.

### **APPLY NOW**

This programme receives significant interest so please apply early online at www.ucd.ie/apply

## **ENTRY REQUIREMENTS**

- A 4-year bachelor's degree in Civil or Structural Engineering with a minimum upper second class honours (NFQ level 8) or international equivalent.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.
- Students who do not meet the IELTS requirement may wish to consider taking the Pre-Sessional or Pre-Masters Pathway. Full details https://www.ucd.ie/alc/ programmes/pathways/

## INTERNATIONAL STUDENTS

- Option to stay in Ireland to seek employment and/or work for 2 years after graduating
- Approved by US Dept of Education for federally supported loans
- Apply for University non-EU Scholarships: www.ucd.ie/global/study-at-ucd/ scholarshipsfinances/scholarships/
- Apply for College of Engineering & Architecture non-EU scholarship: www.ucd.ie/ eacollege/study/noneuscholarships

# RELATED MASTER'S PROGRAMMES OF INTEREST

- MEngSc Structural Engineering
- MEngSc Water, Waste & Environmental Engineering

#### **FEES**

Fee information is available at www.ucd.ie/fees